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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,950	11/05/2003	Elmer G. Fridrich	EF-101E	7154

37053 7590 01/11/2006

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EXAMINER

HINES, ANNE M

ART UNIT	PAPER NUMBER
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2879

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/701,950

Applicant(s)

FRIDRICH, ELMER G.

Examiner

Anne M. Hines

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

The amendment filed on November 25, 2005, has been entered and acknowledged by the Examiner.

Claims 1-16 are pending in the instant application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 3, 6, 7, 10, 11, 12, 13, 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Beesley (US Pat. No. 3,364,378) (of record).

Regarding claims 1 and 11, Beesley discloses a method for mounting a light source in a lamp, wherein the light source comprises an end (Fig. 4, 7) with a lead wire (Fig. 4, 5 & 21) extending therefrom, the method comprising the steps of: forming the light source end with an outward-opening cavity (Fig. 4) about the lead wire; extending the lead wire through the cavity (Fig. 4, 5); extending a support wire (Fig. 4, 28 & 16-18; Column 3, lines 48-50) from a supporting structure of the lamp; and hooking the support wire into the cavity (Fig. 4; Column 3, lines 48-52).

Regarding claims 2 and 12, Beesley further discloses wherein the support wire (Fig. 4, 17) is attached to the lead wire (Fig. 4, 21).

Regarding claims 3 and 13, Beesley further discloses wherein a loop is formed at an outer wire end of the support wire (Fig. 4, see loop formed where the labeled portions 17 and 18 of the support wire meet); and a portion of the loop is attached to the lead wire (Fig. 4; Column 2, lines 51-53).

Regarding claim 6, Beesley further discloses wherein the lamp comprises at least one double ended light source (Fig. 4) comprising first and second lead wires extending respectively from first and second opposed light source ends (Fig. 4, 5), the method further comprising the steps of: forming first and second outward-opening cavities in the respective first and second light source ends (Fig. 4; Fig. 5) about the respective first and second lead wires; extending the respective first and second lead wires through the respective first and second cavities (Fig. 4, 5); extending first and second support wires from a supporting structure of the lamp (Fig. 4, 28 & 16-18; Column 3, lines 56-63); and hooking the first and second support wires into the respective first and second cavities (Fig. 4, 28; Column 3, lines 56-63).

Regarding claim 7, Beesley further discloses wherein the first and second support wires (Fig. 4, 17; Column 3, lines 56-63) are attached to the respective first and second lead wires (Fig. 4, 21; Column 3, lines 56-63).

Regarding claims 10 and 16, Beesley further discloses wherein the support wire is mechanically and electrically attached to the lead wire for providing both support and electrical connection to the light source (Column 1, lines 43-49).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 8, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beesley (US Pat. No. 3,364,378) (of record).

Regarding claims 4 and 14, Beesley teaches wherein an attachment between the lead wire and a portion of the loop that is outward of a hooked portion of the support wire (Fig. 4; also see claim 3 rejection). Beesley fails to teach wherein the support wire places the lead wire in tension between the light source end and the point of lead wire-to-support wire loop attachment. However, one of ordinary skill in the art would know that having the support wire place the lead wire in tension between the light source end and the point of lead wire-to-support wire loop attachment prevents the lead wire from making electrical contact with another portion of the support structure or lamp and thereby prevents electrical shorts. Therefore, it would be obvious to one of ordinary skill in the art to modify the lamp of Beesley to place the lead wire in tension between the light source end and the point of attachment to the support wire in order to prevent electrical shorts.

Regarding claim 8, Beesley teaches wherein the light source is held between the hooked first and second support wires (Fig. 4; Column 3, lines 56-63). Beesley fails to teach wherein the first and second support wires apply compressive end-to-end force

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on the light source. However, one of ordinary skill in the art would know that placing a compressive force on the light source with the first and second support wires makes the light source more stable and can prevent movement due to environmental vibrations. Therefore it would be obvious to one of ordinary skill in the art to modify the lamp of Beesley by placing a compressive force on the light source with the first and second support wires in order to make the light source more stable.

Claims 5 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beesley (US Pat. No. 3,364,378) (of record) and further in view of Thomas et al. (US Pat. No. 5,138,228) (of record).

Regarding claims 5 and 15, Beesley teaches wherein an elbow is formed in the support wire and the elbow is used to hook the support wire into the cavity (Fig. 4, 29). Beesley fails to teach wherein the cavity has a bugled end. Thomas teaches wherein the cavity of a lamp has a bugled end (Fig. 1, see ends of lamp) in order to manage heat flow from the arc chamber of the lamp and increase the efficiency (Column 1, line 66 through Column 2, line 2). Therefore, it would be obvious to one of ordinary skill in the art to modify the lamp of Beesley to have end cavities with bugled ends, as disclosed by Thomas, in order to manage heat flow from the arc chamber of the lamp and increase the efficiency.

Claims 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beesley (US Pat. No. 3,364,378) (of record) and further in view of Gagnon et al. (US Pat. No. 4,480,296) (of record).

Regarding claim 9, Beesley teaches wherein the lamp has a double-ended light source. Beesley fails to teach wherein the lamp comprises two light sources and wherein the light sources are mounted in a crossed configuration. Gagnon teaches the lamp comprises two light sources (Fig. 1, 18 & 20) and wherein the light sources are mounted in a crossed configuration (Fig. 1, 18 & 20; Column 3, lines 41-47) in order to form a rectangular light source (Column 3, lines 30-33). Therefore it would have been obvious to one of ordinary skill in the art to modify the lamp of Beesley to have two light sources mounted in a crossed configuration, as disclosed by Gagnon, in order to form a rectangular light source.

Response to Arguments

Applicant's arguments filed November 25, 2005 have been fully considered but they are not persuasive.

Applicant argues with regard to claims 1 and 11 that the reference Beesley does not exhibit all of the elements cited in the claims, specifically arguing that Beesley does not have an outward-opening cavity about the lead wire, does not extend the lead wire through a cavity, and does not hook the support wire into a cavity. Applicant argues that the definition of the terms cavity or outward-opening cavity is clearly stated in the detailed description on page 54, lines 27-29 with reference to figure 14. Applicant also

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argues that Beesley's Fig. 5 does not show an outward-opening cavity around the lead wire.

The Examiner respectfully disagrees. Page 54, lines 27-29 states the following: "The bugled end 16 comprises an outward-opening cavity about the outer lead wire 83, and the cavity is optionally deepened as desired by the bell mouth 216." This does not explicitly define the word "cavity" or phrase "outward-opening cavity" and therefore is not considered to limit the interpretation of the word "cavity" or phrase "outward-opening cavity". Additionally, words or phrases within the specification, including the claims, cannot be defined with regard to the drawings. For the purposes of examination, the Examiner has given the word "cavity" and phrase "outward-opening cavity" their broadest possible reasonable interpretation. The Merriam-Webster Online Dictionary defines the word cavity as: "an unfilled space within a mass." The presence of the support wire (29) in Beesley necessitates that a cavity for the wire to extend through exists. Therefore, the Examiner considers the invention of Beesley to show all of the structural limitations of claims 1 and 11 including the requirement for an outward-opening cavity about the lead wire, the lead wire extending through the cavity, and the support wire hooking into the cavity.

Applicant argues with regard to claims 2 and 12 that although Beesley shows one instance of attaching the support wire to the lead wire that this applies only to one end of the light source.

The Examiner respectfully disagrees. In response to applicant's argument that the reference fails to show certain features of applicant's invention, it is noted that the

features upon which applicant relies are not recited in the rejected claim(s). The Examiner notes that in claims 1, 2, 11, and 12, applicant has only claimed the structure of one end of a light source mounted in a lamp. In claim 1 applicant claims "a method for mounting a light source in a lamp, wherein the light source comprises an end with a lead wire extending therefrom" and "extending a support wire from a supporting structure of the lamp." In claim 2 the applicant claims "attaching the support wire to the lead wire." Similarly in claim 11 the applicant claims "the light source comprises at least one end with a lead wire extending therefrom" and "a support wire extending from a support structure of the lamp." In claim 12 the applicant claims "an attachment of the support wire to the lead wire." Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Additionally, the claims 2 and 12 only claim the "attaching the support wire to the lead wire"; these claims do not require the support wire and lead wire to be directly attached for the reference (Beesley) to meet the structural requirements.

Applicant argues with regard to claim 7 that Beesley shows only one instance of attaching the support wire to the lead wire. Applicant further argues that the lead wire on the right side of Beesley's Fig. 1 and 4 is connected to a fuse wire which is specifically stated as not being the support wire.

The Examiner respectfully disagrees. The Examiner notes that in Column 3, lines 56-63 Beesley discloses using the support structure of the right side of Fig. 4 on both sides of the lamp capsule. Also, the Examiner has interpreted the phrase "attaching the

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first and second support wires to the respective first and second lead wires” to require only that the lead wires be in some way attached to the support wires, not necessarily directly attached or in a mechanically supporting capacity. Therefore, the Examiner considers Beesley to meet the structural requirements of claim 7, specifically in that the lead wire (5) is attached to the support wire (17) through the intermediary fuse (21).

Applicant argues with regard to claims 10 and 16 that although Beesley shows one instance of mechanically and electrically attaching the support wire to the lead wire, this applies only to one end of the device. Applicant also argues that the disclosure of Beesley states that the lamp is supported independently of the lead wire.

The Examiner respectfully disagrees. The phrase “for providing both support and electrical connection to the light source” is an intended use and is not given patentable weight in a claim to a method. It is the claimed device and not the intended use that is covered by the claim. Accordingly, the attachment of lead wire to the support wire is considered to meet the structural limitations claimed. The Examiner considers the attachment between the lead wire (5) and the support wire (17) through fuse (21) to be a mechanical and electrical attachment, and therefore meets the structural limitations of claims 10 and 16.

Applicant argues with regard to claims 4 and 14 that although the benefits of placing a lead wire in tension may be obvious, it is not obvious how the support structure of Beesley can be adapted to place the lead wire in tension. Applicant further argues that the method/apparatus claimed includes steps of/apparatus for hooking the support wire into the cavity before using the support wire to place the lead wire in

tension between the light source end and the point of lead wire-to-support wire loop attachment.

The Examiner respectfully disagrees. The claims do not specify a direction that the lead wire is required to be in tension, only that the lead wire is in tension "between the light source end and the point of lead wire-to-support wire loop attachment." Therefore, it is possible to have the support structure of Beesley place the lead wire in tension as claimed since the support wire is hooked into the end of the light source above (In Fig. 4) the connection between lead wire-to-support wire loop attachment and the portion of the light source end where the lead wire exits. Additionally, the claim language of claims does not require a particular order as argued by the applicant.

Applicant argues with regard to claims 5 and 15 that Beesley's support wire elbow (between 17 and 18) is formed for a different purpose and could not hook into an end of the light source even if a cavity were provided therein. Applicant argues that Beesley's dummy lead (29) hooks into the end of the light source, but is embedded into the glass, and cannot be said to hook into the cavity. The applicant further argues that the dummy lead is not an elbow formed in the support wire (18), but that it is a dummy lead that is part of the light source due to its being embedded in the glass. Applicant argues that the outward-opening cavity in Thomas is not a cavity with a bugled end and that the term bugled end is used in the applicant's specification and drawings and is an end for the tubing that is flared out diametrically and has a rotationally symmetric profile.

The Examiner respectfully disagrees. The wire elbow of Beesley (at the end of 29) hooks into the cavity. See above discussion of the interpretation of the word cavity.

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Further the Examiner disagrees with applicants suggestion that Beesley's "dummy lead" is not an elbow formed in the support wire but is part of the light source. The purpose of Beesley's "dummy lead" is to support the light capsule (Column 3, lines 49-53).

Applicants argument that the term "bugled end" has been defined in the specification is not persuasive; the cited passage in the specification does not explicitly define the word "bugle" or phrase "bugled end" and therefore is not considered to limit the interpretation of the word "bugle" or phrase "bugled end." Additionally, words or phrases within the specification, including the claims, cannot be defined with regard to the drawings. Also, the Examiner notes that the shape of the ends of the lamp in Thomas' Fig. 1 meet the definition of "bugled" as flared out diametrically and has a rotationally symmetric profile.

Applicant argues with regard to claim 9 that Gagnon does not teach how to arrange two double-ended light sources in a crossed configuration. Applicant also argues that Gagnon concerns, instead, mounting two light sources that are merely coiled filaments, both contained in a single ended arc tube. And, applicant argues that filaments are much lighter than double-ended arc tubes and cannot have the requisite cavities around the lead wires.

The Examiner respectfully disagrees. Gagnon is only relied upon to teach the arrangement of two double-ended light sources in a crossed configuration. Beesley teaches the structural requirements of the light source required by claims 1 and 6, from which 9 depends. Further, although Gagnon teaches light filaments and Beesley teaches light capsules they are considered to be within the same field of endeavor. Therefore, in light of Gagnon's motivation for forming a lamp with crossed light sources

(to form a rectangular light source) it would have been obvious to combine the two inventions: the lamp capsule and supporting structure disclosed by Beesley and the two light source, crossed configuration disclosed by Gagnon.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne M. Hines whose telephone number is (571) 272-2285. The examiner can normally be reached on Monday through Friday from 8:00-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anne M Hines
Patent Examiner
Art Unit 2879

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Msigo 1/5/06
MARICELI SANTIAGO
PRIMARY EXAMINER